

# Submersible Borehole Pump with Integrated Pressure Switch

## Ixo-Pro

### Type Series Booklet



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Type Series Booklet Ixo-Pro

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## Contents

<b>Building Services: Water Supply .....</b>	<b>4</b>
Submersible Borehole Pump with Integrated Pressure Switch .....	4
Ixo-Pro .....	4
Main applications .....	4
Fluids handled .....	4
Operating data .....	4
Design details .....	4
Designation .....	5
Materials .....	5
Product benefits .....	5
Product information .....	5
Technical data .....	6
Characteristic curves .....	7
Dimensions .....	8
Installation information .....	9
Scope of supply .....	9
Accessories .....	9

## Building Services: Water Supply

### Submersible Borehole Pump with Integrated Pressure Switch

## Ixo-Pro



- Suction strainer with a maximum mesh width of 2 mm
- Flow sensor
- Swing check valve

#### Drive

- Water-cooled single-phase AC motor
- 230 V, 50 Hz
- Thermal class F
- IP68 enclosure
- Continuous duty
- Integrated capacitor
- Electronic dry running protection with 4 consecutive start-up attempts
- Thermal overload protection
- Power cable (H07RNF) incl. plug, length 15 m

#### Bearings

- Ball bearing
- Grease-packed bearings sealed for life

#### Shaft seal

- Double shaft seal with oil reservoir fitted in between

#### Main applications

- Rainwater harvesting
- Pressure boosting
- General irrigation systems
- Water extraction

#### Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances

#### Operating data

Table 1: Operating properties

Characteristic		Value
Flow rate	Q [m <sup>3</sup> /h]	≤ 3,9
	Q [l/min]	≤ 65
Head	H [m]	≤ 60
Fluid temperature	T [°C]	≥ +5
		≤ +35

#### Design details

##### Design

- Centrifugal pump
- Close-coupled design
- Multistage
- Integrated pressure switch
- For fully submerged operation
- Low-level inlet

## Designation

### Example: Ixo-Pro 4 Pack Plus

**Table 2:** Designation key

Code	Description	
Ixo-Pro	Type series	
4	Number of stages	
Pack Plus	Version	
	Pack	With Kit-Press (pressure switch connection set)
	Pack Plus	With Kit-Press (pressure switch connection set) and pump foot

## Materials

**Table 3:** Overview of available materials

Part No.	Description	Material
101	Pump shroud	Stainless steel AISI 304
108	Discharge casing	Stainless steel AISI 304
143	Suction strainer	Stainless steel AISI 304
171	Diffusers	Technopolymer (glass fibre reinforced polymer)
210	Pump shaft	Stainless steel AISI 304
230	Impellers	Stainless steel AISI 304
433	Mechanical seal	Aluminium graphite, ceramic graphite
811	Motor housing	Stainless steel AISI 304

## Product benefits

- Easy and convenient installation with integrated pressure switch and completely wired cable, including plug
- Kit-Press (pressure switch connection set) extends the service life of the pump by preventing pressure surges in the discharge line and excessive starting/stopping.
- Corrosion-resistant with pump shroud and impellers made of stainless steel AISI 304
- High operating reliability with water-cooled motor with integrated thermal protection, electronic dry running protection and integrated swing check valve

## Product information

### Product information as per Regulation No. 1907/2006 (REACH)

For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see <https://www.ksb.com/ksb-en/About-KSB/Corporate-responsibility/reach/>.

**Technical data**

**Ixo-Pro**

**Table 4:** Technical data (for Germany)

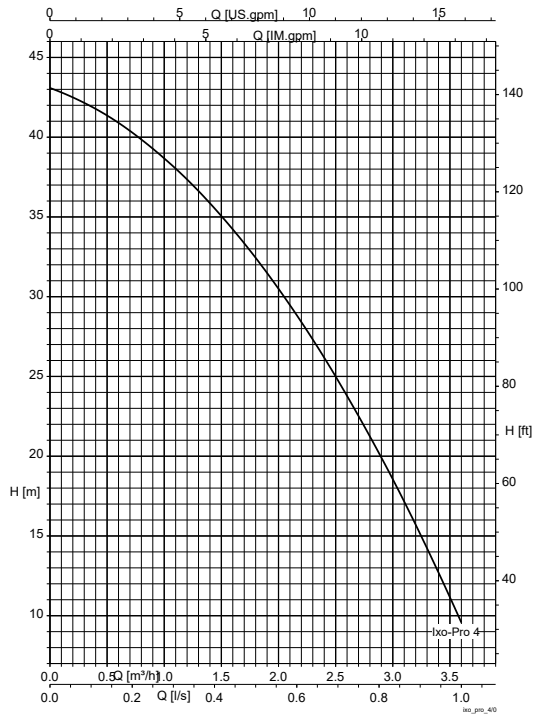
Size	Number of stages	Discharge-side connection	P <sub>1</sub>	P <sub>N</sub>	I <sub>N</sub>	Start-up pressure	Maximum working pressure	Capacitor	Power cable	Mat. No.	[kg]
					1~230 V, 50 Hz				H07 RNF		
			[kW]	[kW]	[A]	[bar]	[bar]	[μF]	[m]		
Ixo-Pro 4 Pack	4	G 1	0,80	0,55	3,60	2	6	12	15	39300242	12,4
Ixo-Pro 6 Pack	6	G 1	1,20	0,90	6,20	3	12	16	15	39300243	13,4

**Table 5:** Technical data (for all countries except Germany)

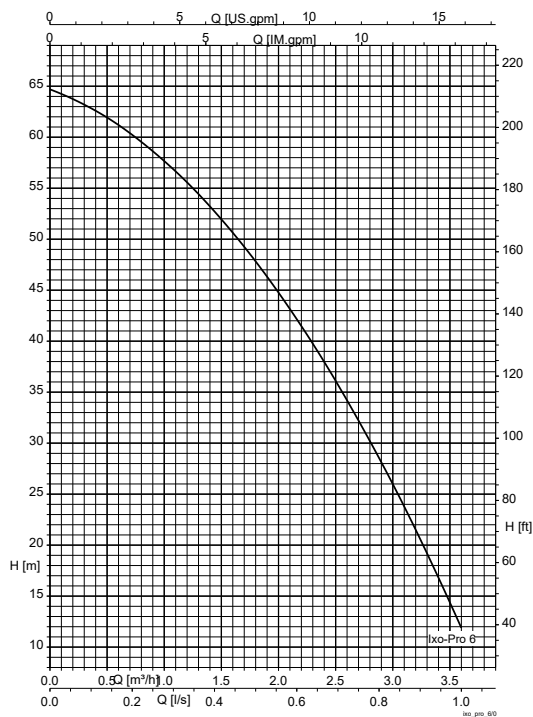
Size	Number of stages	Discharge-side connection	P <sub>1</sub>	P <sub>N</sub>	I <sub>N</sub>	Start-up pressure	Maximum working pressure	Capacitor	Power cable	Mat. No.	[kg]
					1~230 V, 50 Hz				H07 RNF		
			[kW]	[kW]	[A]	[bar]	[bar]	[μF]	[m]		
<b>Ixo-Pro</b>											
Ixo-Pro 4	4	G 1	0,80	0,55	3,60	2	6	12	15	39300168	11,5
Ixo-Pro 6	6	G 1	1,20	0,90	6,20	3	12	16	15	39300169	12,5
<b>Ixo-Pro Pack</b>											
Ixo-Pro 4 Pack	4	G 1	0,80	0,55	3,60	2	6	12	15	39300242	12,4
Ixo-Pro 6 Pack	6	G 1	1,20	0,90	6,20	3	12	16	15	39300243	13,4
<b>Ixo-Pro Pack Plus</b>											
Ixo-Pro 4 Pack Plus	4	G 1	0,80	0,55	3,60	2	6	12	15	39300244	14,6
Ixo-Pro 6 Pack Plus	6	G 1	1,20	0,90	6,20	3	12	16	15	39300245	15,6

Characteristic curves

Ixo-Pro 4, n = 2900 rpm



Ixo-Pro 6, n = 2900 rpm



Dimensions

Ixo-Pro

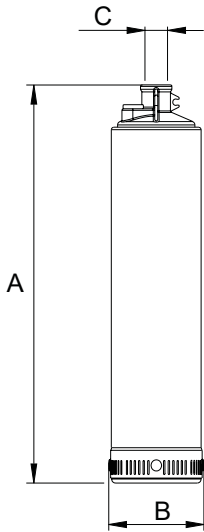


Fig. 1: Pump set dimensions

Table 6: Pump set dimensions

Size	Dimensions		Thread
	A	B	C
	[mm]	[mm]	
4	493	126	G 1
6	560	126	G 1

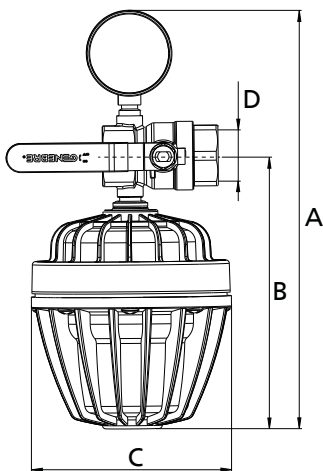


Fig. 2: Kit-Press (pressure switch connection set) dimensions

Table 7: Kit-Press (pressure switch connection set) dimensions

Dimensions			Thread
A	B	C	D
[mm]	[mm]	[mm]	
260	162	124	G 1



### Installation information

**i** Installing the pressure switch connection set in the discharge line above the water level is recommended. The pressure switch connection set prevents pressure surges and continual starting and stopping in the event of leakages.

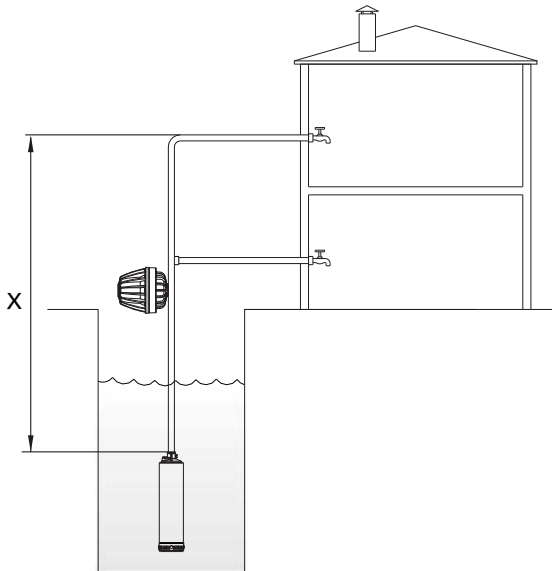


Fig. 3: Installation information

### Accessories

#### Pump accessories

Table 9: Pump accessories

	Description	Connection	x			Mat. No.	[kg]
			Ixo-Pro	Ixo-Pro Pack	Ixo-Pro Pack Plus		
	+ Kit-Press (pressure switch connection set) Comprising an expansion vessel and a shut-off valve with pressure gauge (installation in the discharge line above the water level)	G 1	x	<sup>1)</sup>	<sup>1)</sup>	39300170	1,2
	Pump foot Option of floating-suction water intake	-	x	<sup>1)</sup>	<sup>1)</sup>	39300171	2,2

<sup>1</sup> Included in the scope of supply







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